NOAA Observing Systems Architecture (NOSA)

- **Program Review Team (PRT) tasking**
  - Document baseline NOAA Observing Systems Architecture
  - Develop target (10-20 years) NOAA Observing Systems Architecture

- **To implement PRT tasking, NOAA observing system architect office and NOAA Observing Systems Council were established**

NOAA Observing Systems Architect Office

- **Responsible for**
  - Maintaining baseline NOAA Observing Systems Architecture
  - Developing target (10-20 years) NOAA Observing Systems Architecture

- **Resides in NESDIS with dual reporting to NESDIS and PPI**

NOAA Observing Systems Council (NOSC)

Mission:

- Principal advisory body to the Under Secretary for NOAA's Earth observation and data management (end-to-end) activities

- Principal coordinating body for NOAA to the White House Committee on Environment and Natural Resources (CENR) Subcommittee on Earth Observations in developing an international, comprehensive, coordinated and sustained Earth observation system

NOAA Observing Systems Council (NOSC)

Specific Tasks:

- Provide recommendations to the NOAA Executive Council (NEC) and NOAA Executive Panel (NEP) on requirements, architectures, and acquisitions to meet NOAA, national, and international observing needs

- Oversee the work of the NOAA Observing Systems Architect, providing guidance in the development of the NOAA Integrated Global Environmental Observation and Data Management System architecture

- Work with local, state, regional, national, and international partners to develop global-to-local environmental and ecological observation and data management systems for comprehensive, continuous monitoring of coupled ocean/atmosphere/land domains.

NOAA Observing Systems Council (NOSC)

Membership:

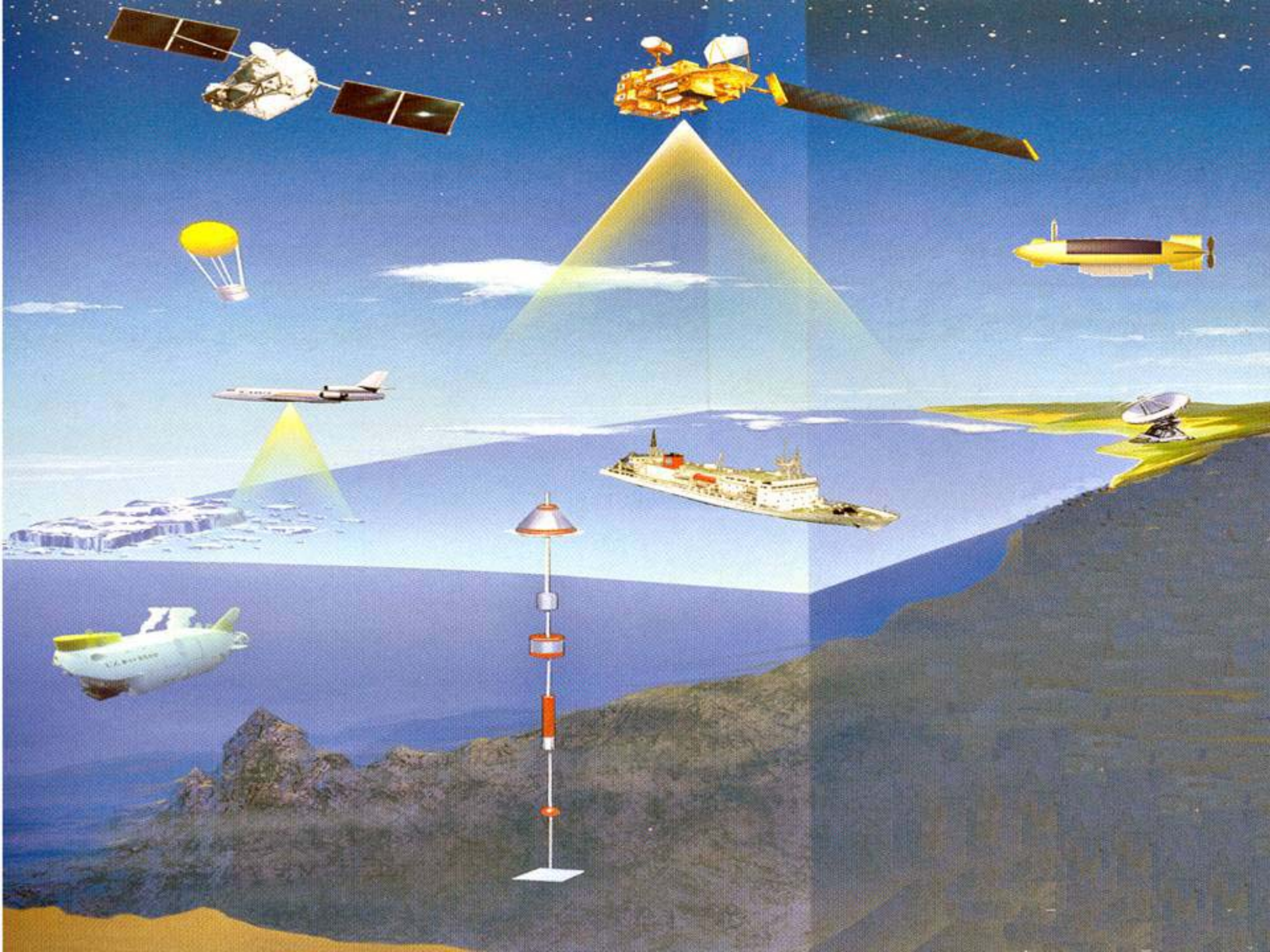
- Chair: Gregory W. Withee (NESDIS)
- Mary Glackin (PPI)
- Bill Fox (NMFS)
- Carl Staton (OCIO)
- Vicki Nadolski (NWS)
- Ted Lillestolen (NOS)
- Mike Johnson (OAR)
- Beth White (NMAO)
- Executive Secretariat: Mike Crison (NESDIS)
- Advisor – NOAA Observing Systems Architect
- Staff – NOAA Observing Systems Architect office

Target NOAA Observing Systems Architecture (NOSA)

- **NOAA target architecture for the next 10-20 years**
  - Will be developed by NOAA observing systems architecture office and approved by corporate NOAA
  - First draft will be available in FY04

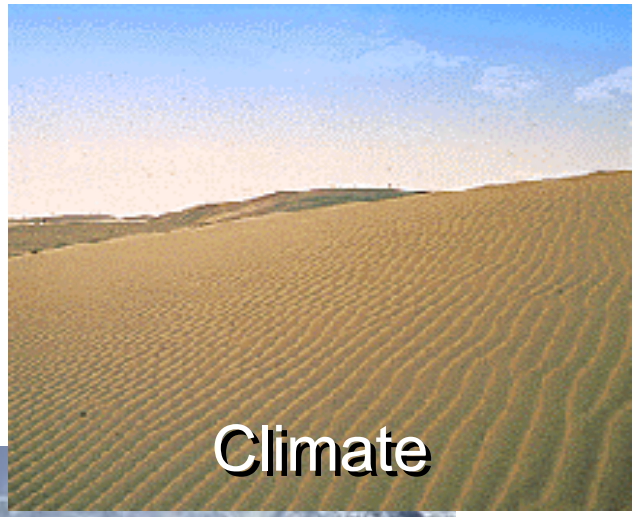
- **Encompasses all observing platforms**
  - Remote Sensing platforms (Spaceborne, Airborne, Sea-based) and In-Situ
  - Includes associated data management systems

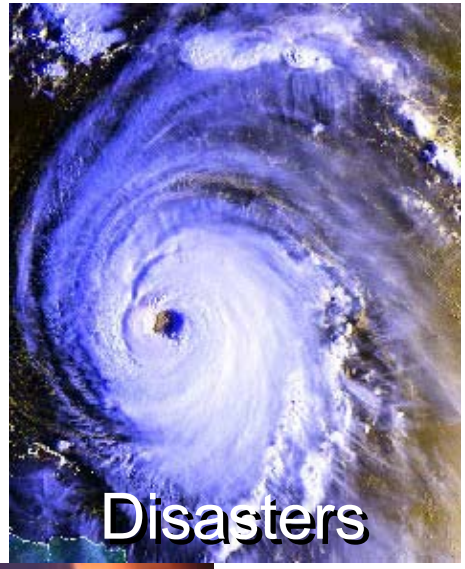
- **GOES R requirements allocations and system architecture will be reviewed for conformity to NOAA architecture**

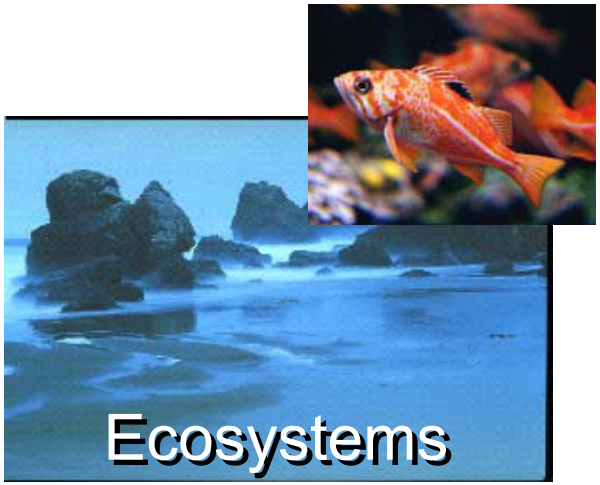


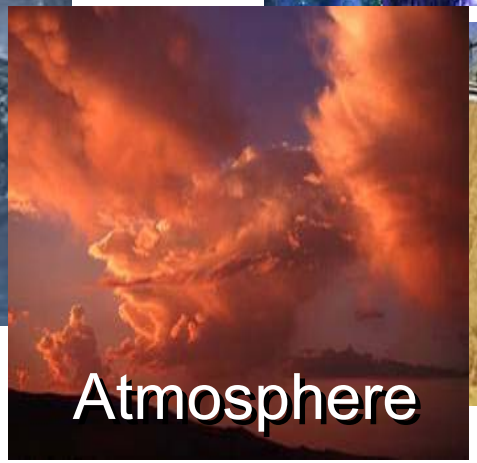
GROUP ON EARTH OBSERVATIONS

Earth Observation Elements









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EO Summit Declaration

- **Affirmed need for timely, quality, long-term, global information as a basis for sound decision making.**
- **Recognized need to support:**
  1) Comprehensive, coordinated, sustained Earth observation system or systems;
  2) Coordinated effort to address capacity-building needs related to Earth obs;
  3) Exchange of observations in a full and open manner with minimum time delay and minimum cost; and
  4) Preparation of a 10-year Implementation Plan, building on existing systems and initiatives
     1) Framework for Tokyo ministerial, April or May 2004
     2) 10-year plan for Brussels ministerial in late 2004.
- **Established *ad hoc* Group on Earth Observations (GEO) to develop Plan**
- **Invited other governments to join.**

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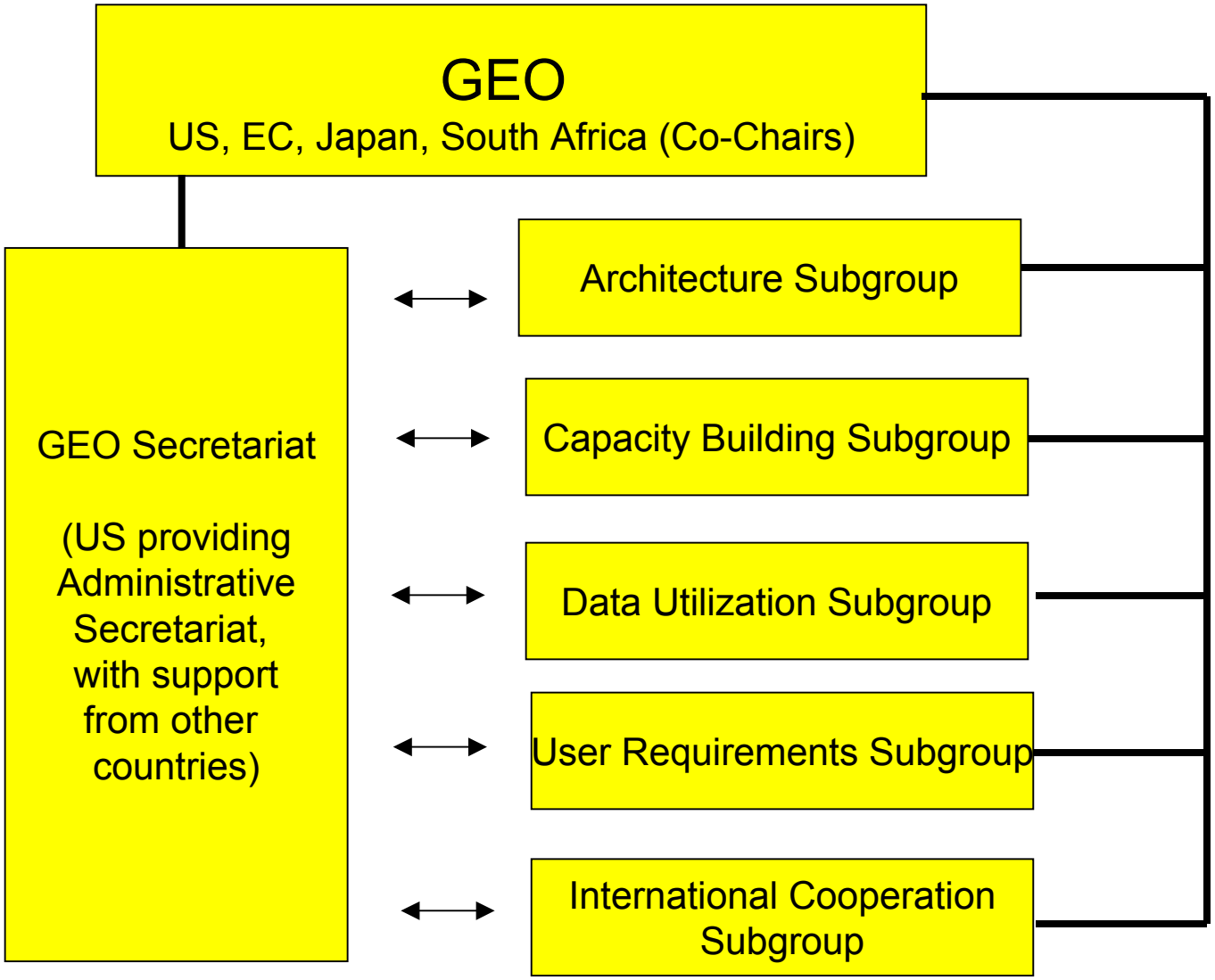
GEO Structure



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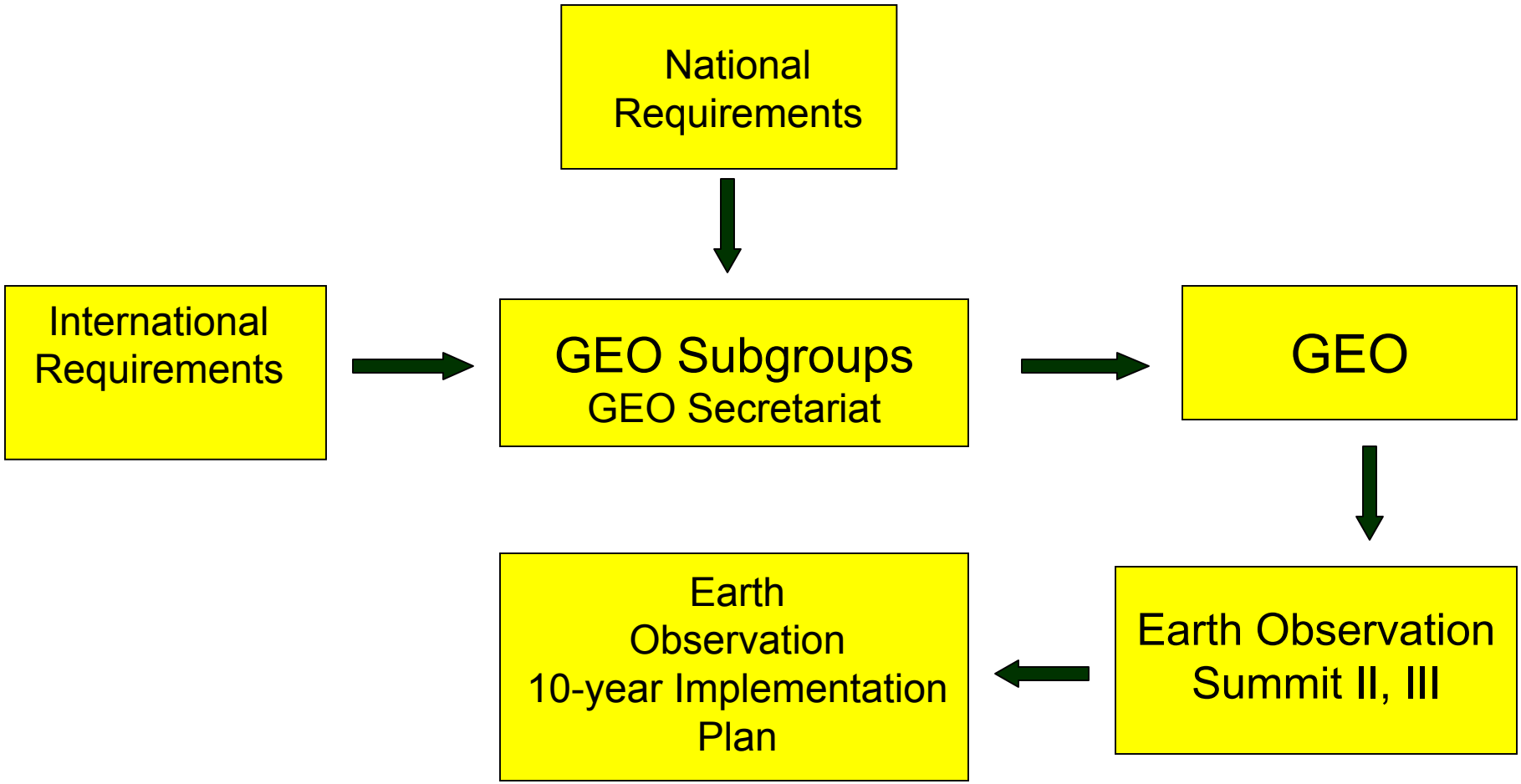
Earth Observation Components



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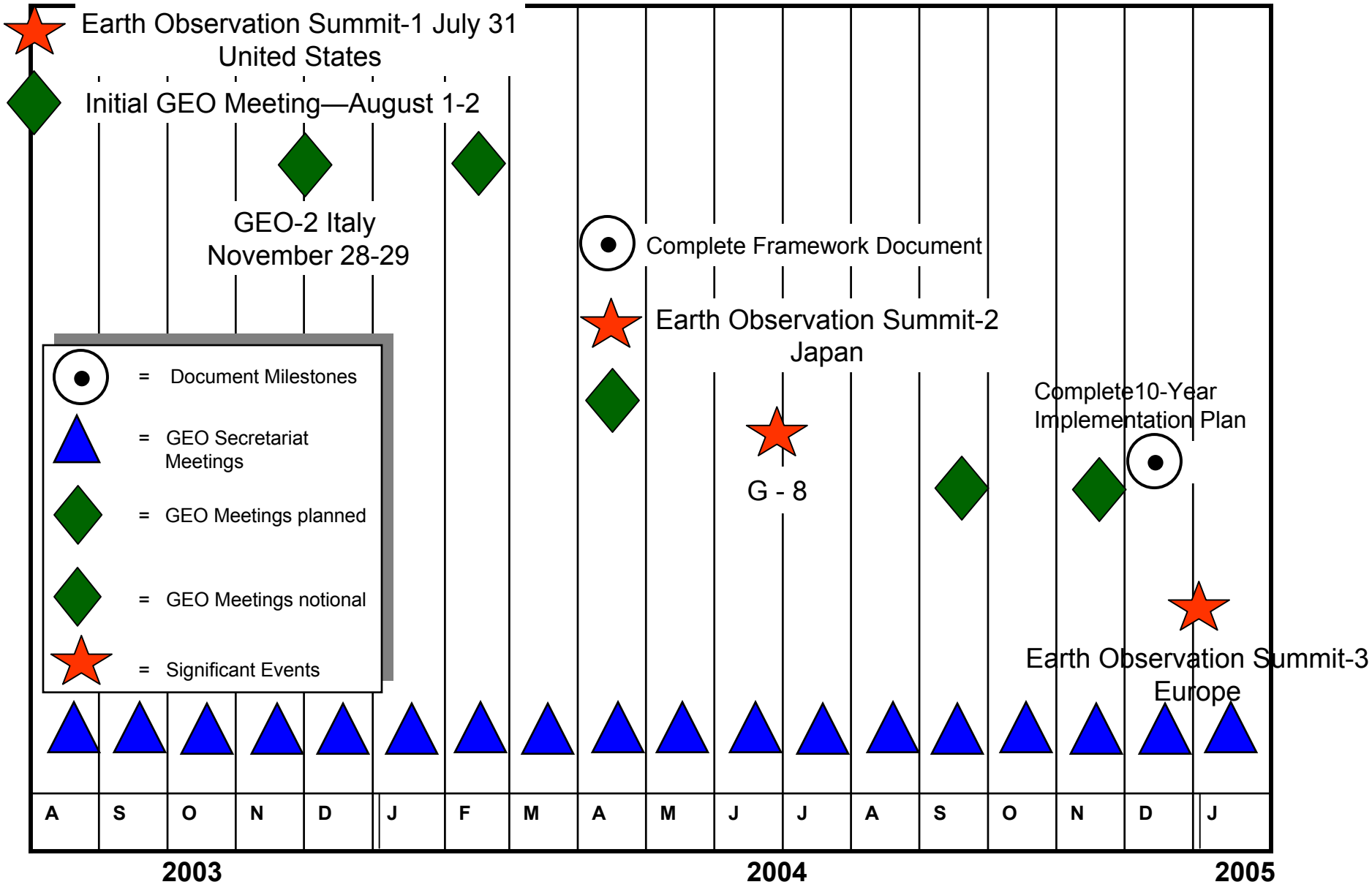
Draft Calendar



So What Does All This Mean to GOES R?

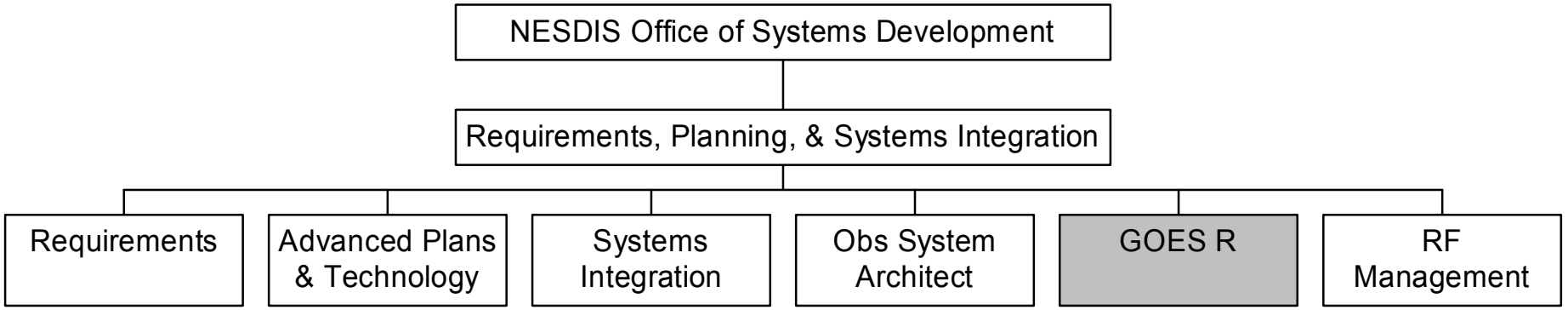
- **GOES R is being developed as part of a larger observing system of systems**

- **Requirements and architecture considerations are going beyond "typical GOES"**
  - NOAA-wide
  - National – considering other agency requirements
  - International coordination

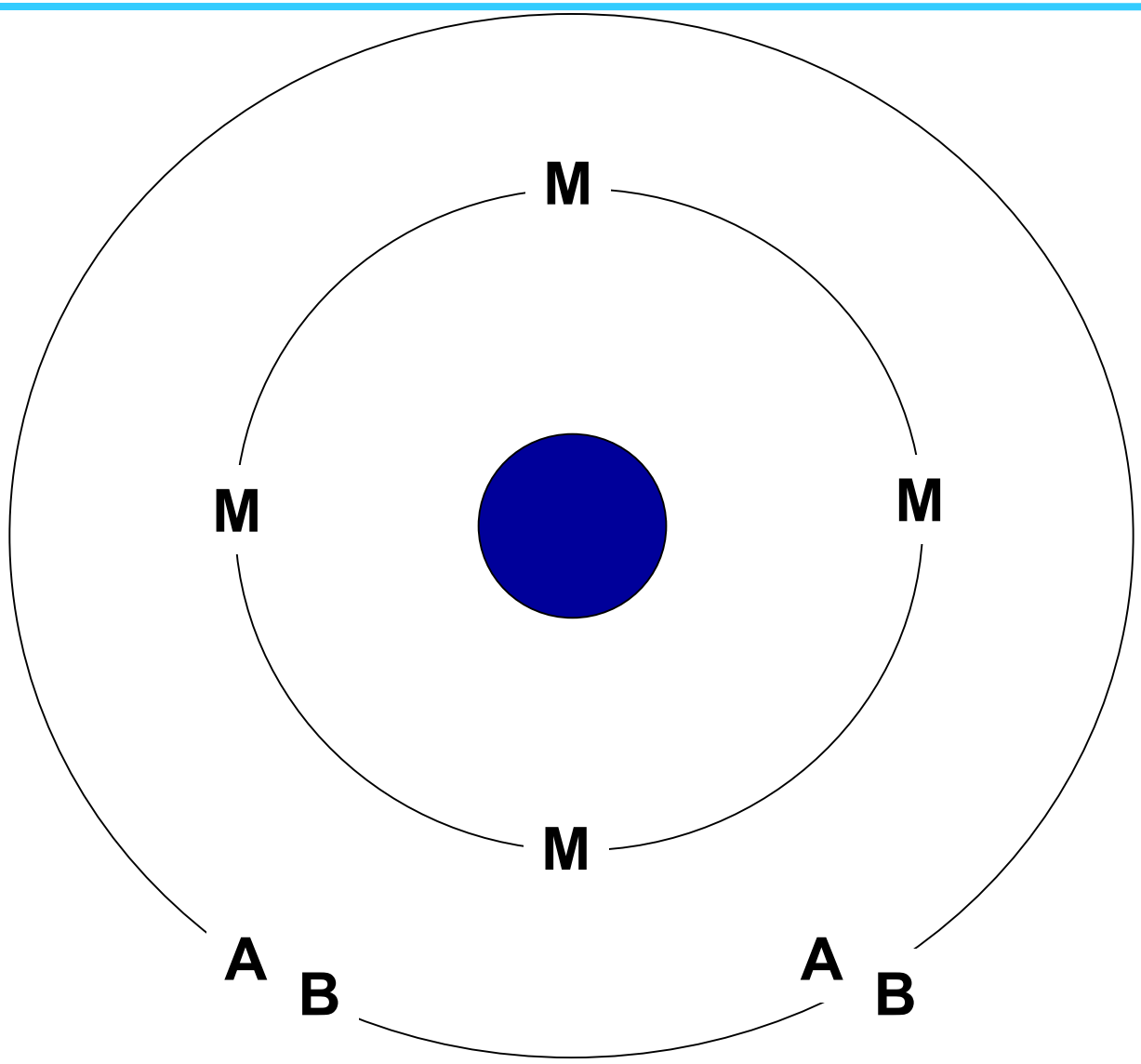
Impact to GOES R Architecture Efforts

- **Minimal direct impact – for example, no interface requirements available, yet**
- **However, *opportunity* exists to consider "bigger" picture**
- **Wording in contract meant to leave door open**

RPSI Integrated Team Structure



Architecture Opportunity Example



NOSA Summary

- **No direct taskings or requirements**
- **Should be viewed as opportunity**